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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/053,323 05/08/97 TALIEH

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QM22/0508

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EXAMINER

NGUYEN, G

ART UNIT	PAPER NUMBER
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18

DATE MAILED:

05/08/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.  
08/853,323

Applicant(s)

Talieh et al.

Examiner

Nguyen

Group Art Unit

3723



Responsive to communication(s) filed on Feb 28, 2000

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

### Disposition of Claims

Claim(s) 32, 34, and 36-43 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 32, 34, and 36-43 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 32, 34, and 36-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 32, 34, 36-38, and 40, the phrase “chemical mechanical planarization” renders the claim indefinite because it is unclear how the phrase modifies the polishing pad. It does not add any structural limitations to distinguish the claimed polishing pad.

In claims 32, 34, 36-38, and 40, the phrase “non-fixed abrasive” renders the claim indefinite because it is unclear what the phrase intends to modify. It does not add any structural limitations to distinguish the claimed polishing pad.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 32, 34, and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbard et al.'844 in view of McGarvey'765 and Kircher et al.'743.

With reference to Figs. 1-3, column 5, line 45 bridging to column 6, line 62, column 15, line 45 bridging to column 16, line 44, Hibbard discloses the claimed invention except for the backing layer being formed of metal.

McGarvey discloses an abrasive belt. With reference to column 2, lines 12-22, McGarvey discloses that the backing material may consist of any conventional backing used in abrasive coated products. The backing material (1) may be glue, resin, or varnish, the choice of which depends on the desired flexibility and stretch, resistance to heat and other factors which are determined by the intended use of the finished article and production requirements.

Kircher et al.'743 discloses an abrasive coating article. With reference to Figs. 1-3, the polishing pad 2 is attached to a metal backing 2, such as steel, brass, copper, or aluminum. The metal backing provides flexibility, resiliency, and strength, as well as having the property of preventing warpage in the finished article.

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the belt being formed of metal since it was known in the art as taught by McGarvey and Kircher that the choice of the metal backing material would provide the desired flexibility, resistance to heat, and strength to prevent warpage in the finished article.

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***Response to Arguments***

5. Applicant's arguments filed February 28, 2000 have been fully considered but they are not persuasive.

In response to the applicant's argument that the prior art fails to disclose a polishing pad configured to polish semiconductor wafer with a polishing slurry, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Furthermore, note in Hibbard'844, column 15, line 51 bridging to column 16, line 35, Hibbard discloses an endless abrasive belt assembly to polish ceramic or glass workpiece with a polishing slurry (cutting fluid, column 16, lines 11-14). The surface finish associated with the workpiece surface is measured in micrometers Ra.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Nguyen whose telephone number is (703) 308-0163. The examiner can normally be reached on Monday-Friday from 7:00 AM-3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Scherbel, can be reached at (703) 308-1272. The fax number for this Group is (703) 305-3579.

An inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-1148.

George Nguyen  
Patent Examiner

George Nguyen

5/5/2000



David A. Scherbel  
Supervisory Patent Examiner  
Group 3700